

Date: Thursday, 4/12/2007 8:45:34 AM
 User: Kim Johnston

Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: BRACKET ASSEMBLY
Job Number	: 31727		
Estimate Number	: 10278		
P.O. Number	: <i>N/A</i>	Part Number	: D3121141
This Issue	: 4/12/2007 S.O. No. : <i>N/A</i>	Drawing Number	: D3121 REV D
Prsht Rev.	: NC	Project Number	: N/A
First Issue	: <i>N/A</i> Type : MACHINED PARTS	Drawing Revision	: D
Previous Run	: 31654	Material	: <i>N/A</i>
Written By	: <i>[Signature]</i>	Due Date	: 5/5/2007
Checked & Approved By	: <i>[Signature]</i>	Qty:	12 Um: Each
Comment	: Est Rev. Pick A 04.02.18 New issue KJ/DS		

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
---------	-----------------------	---------------

1.0	M174B1000X02000	17-4 SS Bar
-----	-----------------	-------------



Comment: Qty.: 0.5775 f(s)/Unit Total : 6.9300 f(s)

Material: 17-4 SS Bar per AMS 5604/5643

(M17-4-B1.000x02.000)

Identify for D3121-111

Batch: *M114773**M 101422 = 1 piece**gmk 07/04/24**12*

2.0	BAND SAW	BAND SAW
-----	----------	----------



Comment: BAND SAW

Cut blanks: (1.000" x 2.000") 6.600" long

*gmk 07/04/24**12*

3.0	HAAS1	HAAS CNC VERTICAL MACHINING #1
-----	-------	--------------------------------



Comment: HAAS CNC VERTICAL MACHINING #1

1-Machine D3121-111 as per Folio FA361 and Dwg D3121 Identify as D3121-111

2-Deburr

3-Scribe batch number

*SD / gmk 07/04/29**12*

4.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
-----	-----	--








Comment: INSPECT PARTS AS THEY COME OFF MACHINE

*SD / gmk 07/04/29**12*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA: ☒ Date: 07/05/03

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
07/04/27	3.0	- Part moved while machining	 07/04/27	scrap and replace	 07/04/27	 07/04/30	 07/04/30	 07/04/30

NOTE: Date & initial all entries

Date: Thursday, 4/12/2007 8:45:34 AM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BRACKET ASSEMBLY

Job Number: 31727

Part Number: D3121141

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

QC8

SECOND CHECK



Comment: SECOND CHECK

92 07-04-30

12

6.0

D312121

Bolt



Comment: Qty.: 1.0000 Each(s)/Unit Total : 12.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 D3121-21

Bolt B31758

92 07/04/30

12

7.0

D3121241

Bearing Assembly



Comment: Qty.: 1.0000 Each(s)/Unit Total : 12.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 D3121-241 Bearing Ass

B31700

92 07/04/30

12

8.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

Assemble D3121-141 as per Dwg D3121.

92 07/04/30

12

9.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

92 07/05/02

(12)

10.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: 57233

92 7/5/2

(12)

11.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

92 07/05/03

(12)

Job Completion



92 07/05/03

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order: 31727
Description: Bracket		Part Number: D3121-111
Inspection Dwg: D3121	Rev: D	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.392	+0.002/-0.000					
0.75	+/-0.030					
0.375	+/-0.010					
2.14	+/-0.030					
0.950	+/-0.010					
0.600	+/-0.010					
1.96	+/-0.030					
0.280	+/-0.010					
3.330	+/-0.010					
3.630	+/-0.010					
R0.25	+/-0.030					
R0.375	+/-0.010					
Ø0.201	+0.005/-0.000					
0.100	+/-0.010					
6.18	+/-0.030					
5.89	+/-0.030					
0.080	+/-0.010					
0.300	+/-0.010					
30°	+/-0.1°					
R0.25	+/-0.030					
0.130	+/-0.010					
0.381	+/-0.010					
0.281	+/-0.010					
0.400	+/-0.010					
0.580	+/-0.010					
100°	+/-0.1°					
0.32	+/-0.010					

Same
W/O
31654

Measured by: SA	Audited by: BC	Prototype Approval: N/A
Date: 07.04.27	Date: 07.04.30	Date: N/A

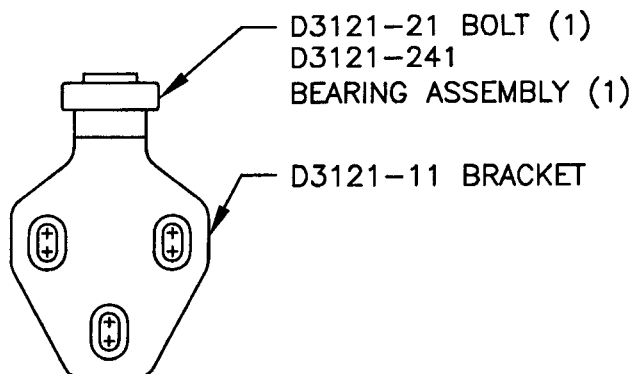
Rev	Date	Change	Revised by	Approved
A	04.01.12	New Issue P/O D3121-141	KJ/RF	
B	04.05.05	Dimensions changed/re-arranged per Dwg revision	KJ/JLM	
C	06.06.14	Dwg Rev. updated	KJ/JLM	



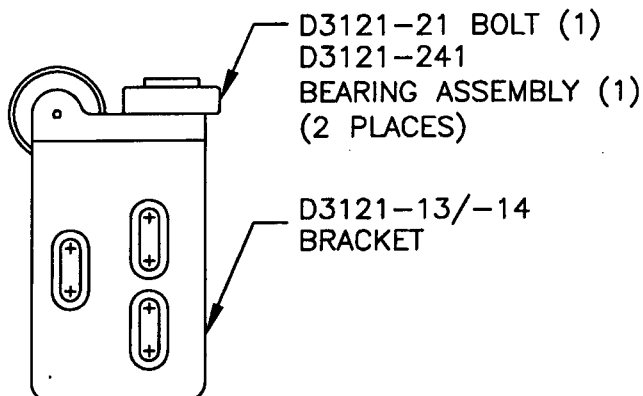
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CHECKED	APPROVED	DRAWING NO.	REV. D
		D3121	SHEET 1 OF 10
DATE		TITLE	SCALE
06.05.17		BRACKET ASSEMBLY	1:2
A	02.04.15	NEW ISSUE	
B	03.01.16	ADD RIDGES; ADD MAT'L PROP; FIX P/N ADD -141/-143/-144/-145/-146	
C	04.02.17	ADD CLEARANCE; USE -241 BEARING	
D	06.05.17	D3121-25 CAP WAS 1.024, NOW 1.000	

RELEASED

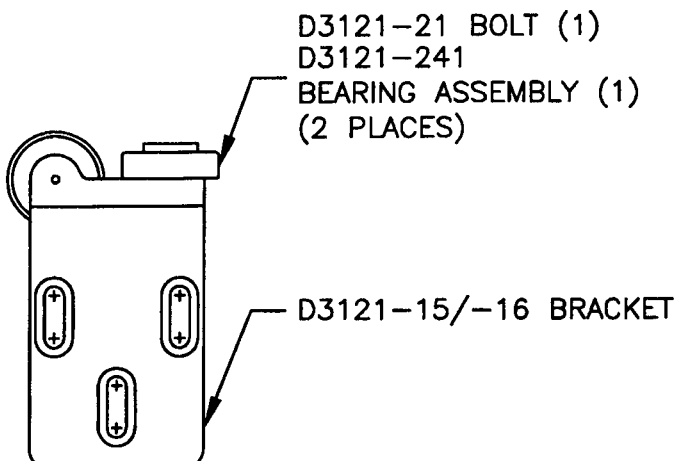
06.06.02



D3121-041 BRACKET ASSEMBLY
(REPLACES PREMIER P/N B30-23000-33)



**D3121-043 (SHOWN) / D3121-044 (OPPOSITE)
BRACKET ASSEMBLY**
(REPLACES PREMIER P/N B30-23000-37/-38)



**D3121-045 (SHOWN) / D3121-046 (OPPOSITE)
BRACKET ASSEMBLY**
(REPLACES PREMIER P/N B30-23000-35/-36)

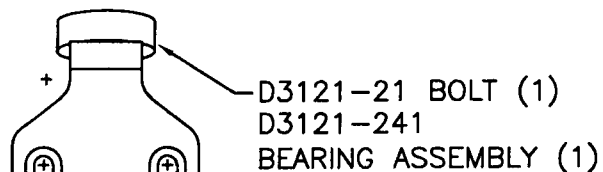
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DATE 06.05.17		TITLE BRACKET ASSEMBLY	SCALE 1:2



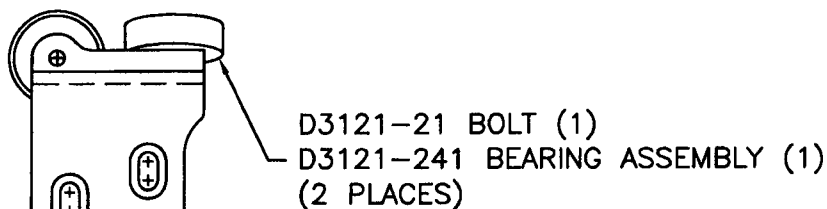
D3121-111 BRACKET

D3121-141 BRACKET ASSEMBLY

(REPLACES PREMIER P/N B30-23001-01)

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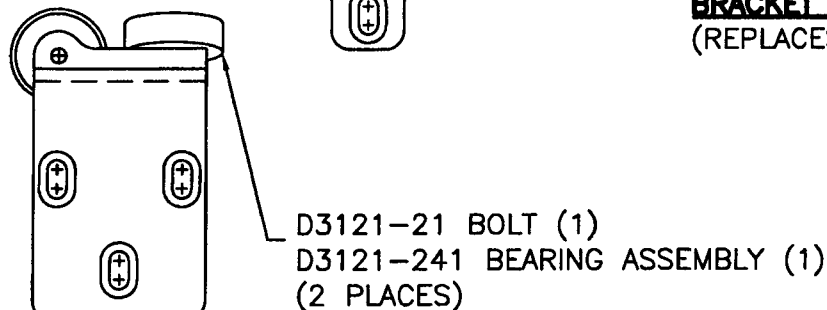
06.06.02



D3121-113/-114 BRACKET

**D3121-143 (SHOWN) / D3121-144 (OPPOSITE)
BRACKET ASSEMBLY**

(REPLACES PREMIER P/N B30-23000-03/-04)

D3121-115/-116
BRACKET**D3121-145 (SHOWN) / D3121-146 (OPPOSITE)
BRACKET ASSEMBLY**

(REPLACES PREMIER P/N B30-23000-05/-06)

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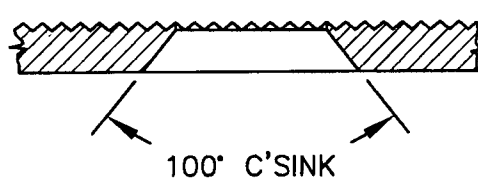
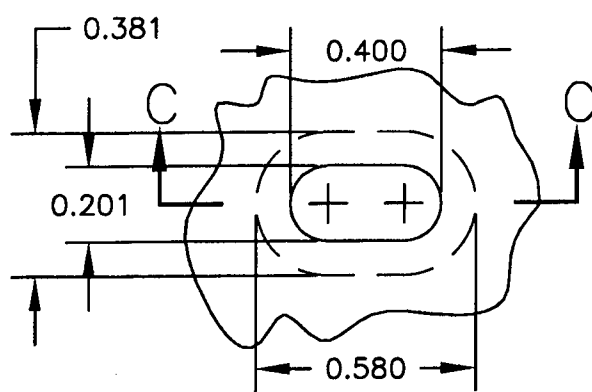
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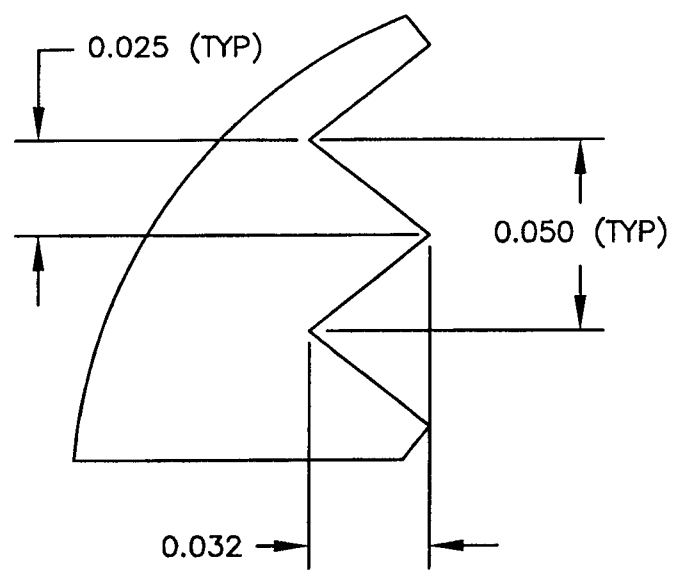
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DATE 06.05.17		TITLE BRACKET ASSEMBLY	SCALE 1:1

**DETAIL A:
SLOT DETAIL**
SCALE 2:1
VIEW ROTATED



**SECTION
C-C**

**DETAIL B:
RIDGE DETAIL**
PARTIAL SECTION
SCALE 1:20



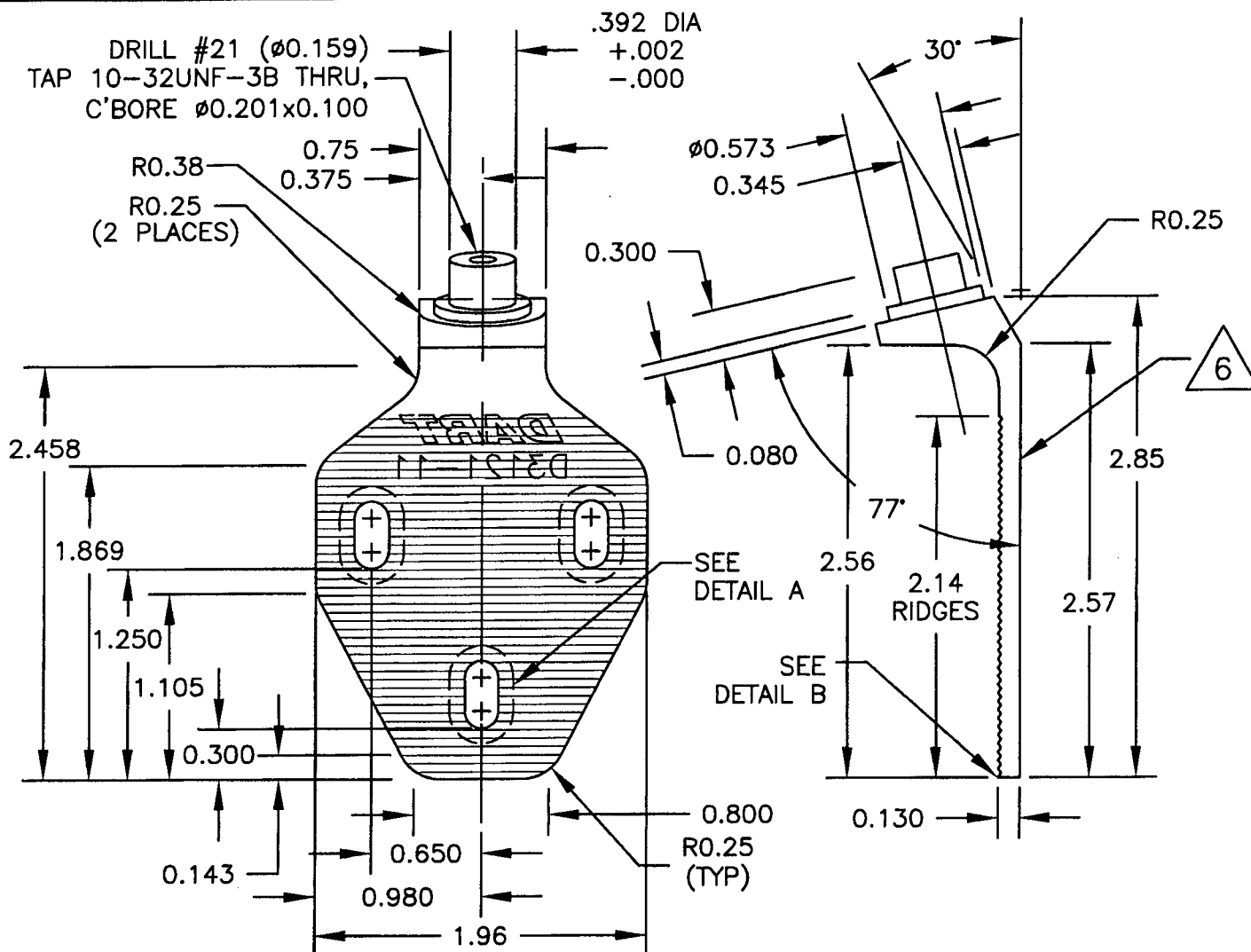
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DATE 06.05.17	TITLE BRACKET ASSEMBLY		SCALE 1:1

**D3121-11 BRACKET**

- 1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE = 150 ksi
MIN YIELD TENSILE = 100 ksi
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 5) ENGRAVE DART P/N & LOGO AS SHOWN
- 6) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

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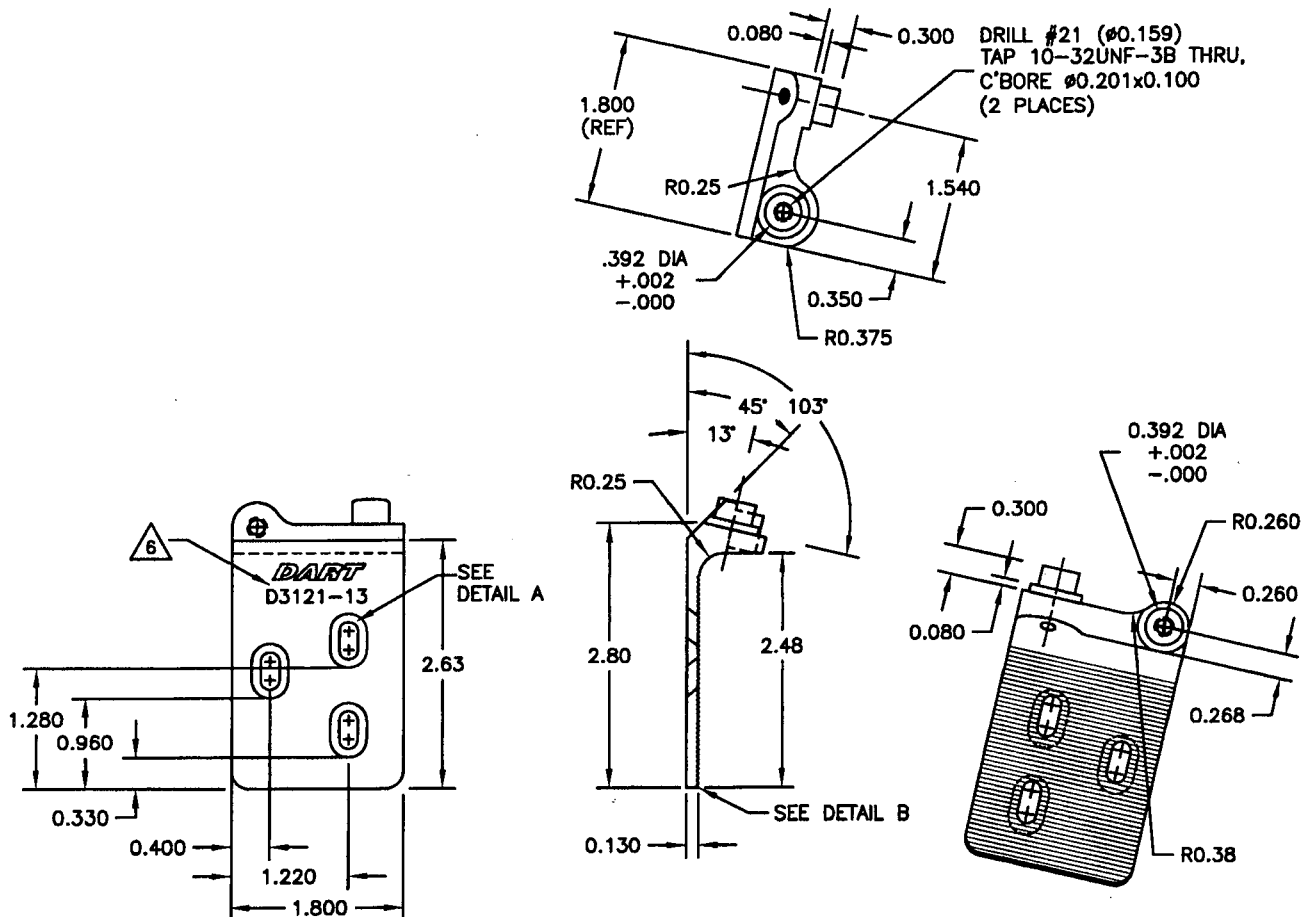
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DATE 06.05.17	TITLE BRACKET ASSEMBLY		SCALE 1:2



D3121-13 BRACKET (SHOWN)
D3121-14 BRACKET (OPPOSITE)

- 1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE STRENGTH = 150 ksi
MIN YIELD TENSILE STRENGTH = 100 ksi
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 5) ENGRAVE DART P/N & LOGO AS SHOWN
- 6) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

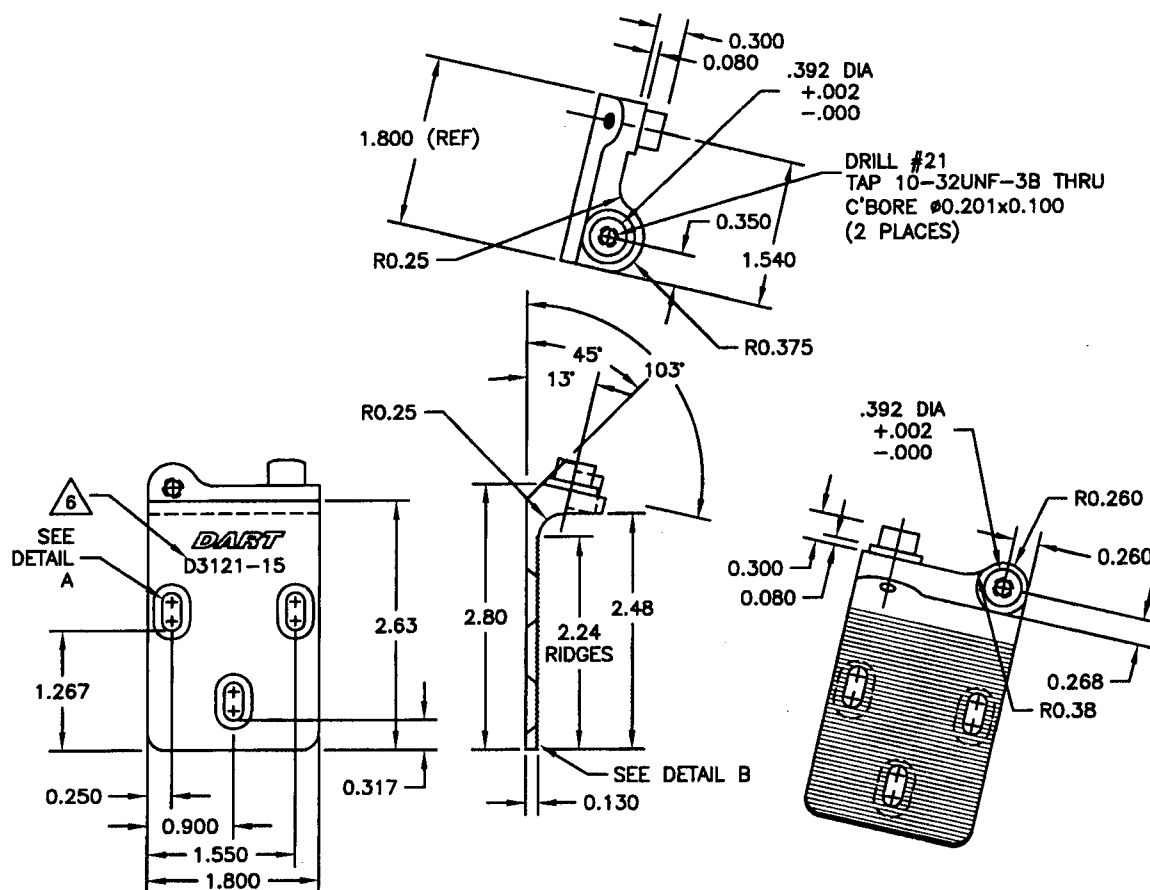
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DATE 06.05.17		TITLE BRACKET ASSEMBLY	SCALE 1:2



D3121-15 BRACKET (SHOWN)
D3121-16 BRACKET (OPPOSITE)

- 1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE = 150 ksi
MIN YIELD TENSILE = 100 ksi
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 5) ENGRAVE DART P/N AND LOGO AS SHOWN
- 6) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

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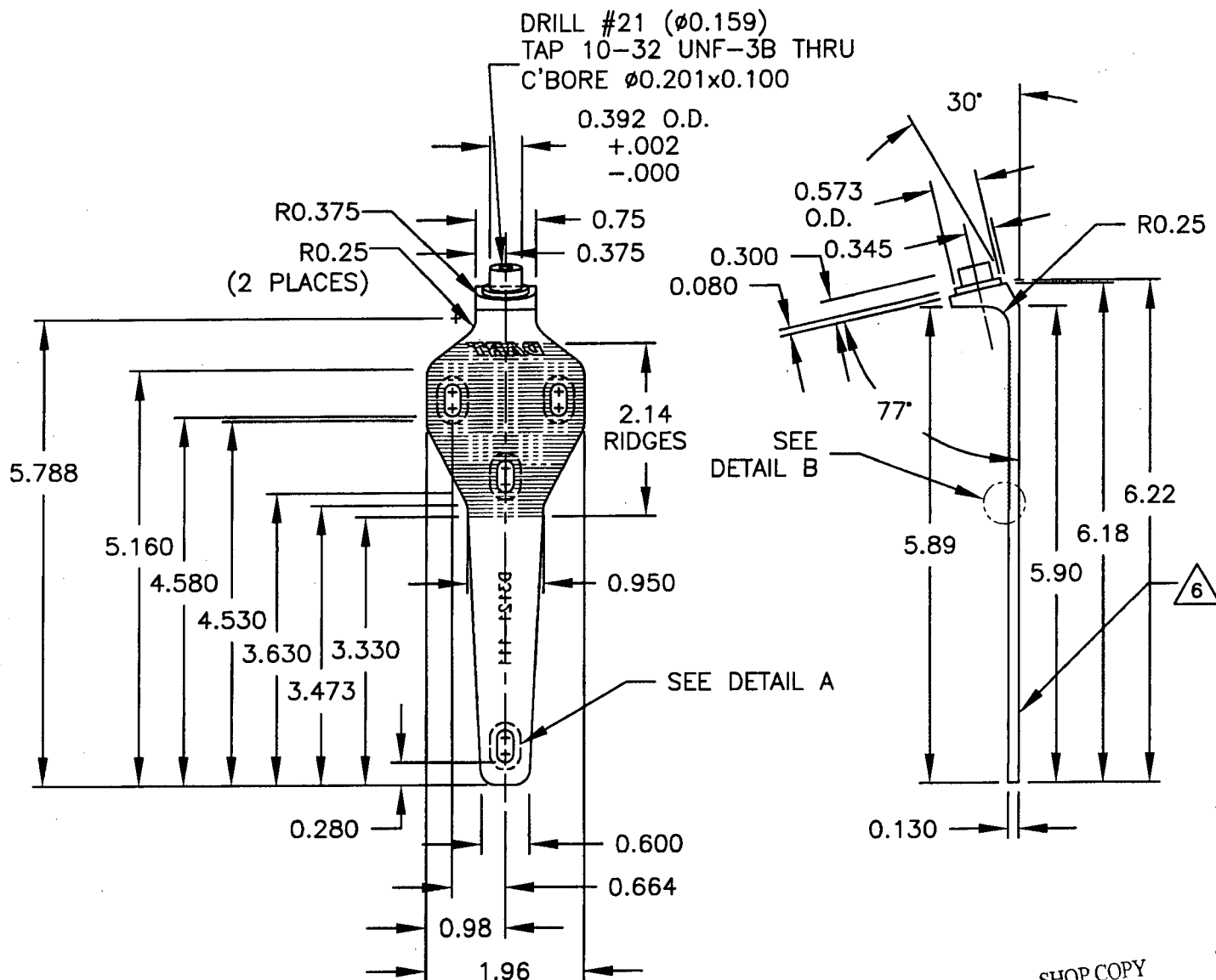
06-06-02 J.H.

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CHECKED #	APPROVED #	DRAWING NO. D3121	REV. D SHEET 7 OF 10
DATE 06.05.17	TITLE BRACKET ASSEMBLY		SCALE 1:2

**D3121-111 BRACKET**

- 1) REPLACES PREMIER P/N B32-23001-11
- 2) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE = 150 ksi
MIN YIELD TENSILE = 100 ksi
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 6) ENGRAVE DART P/N & LOGO IN AREAS SHOWN
- 7) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

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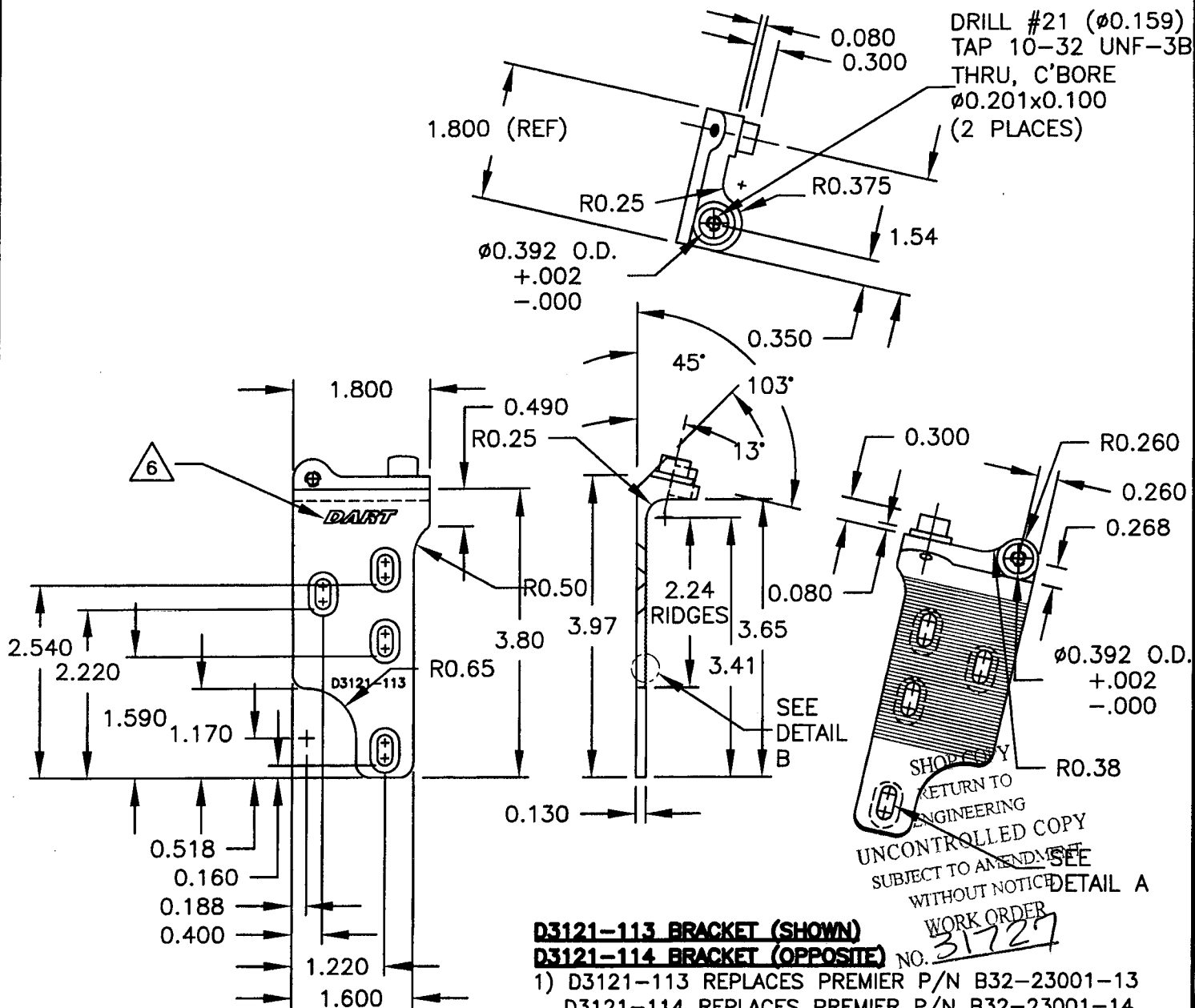
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CHECKED JH	APPROVED JH	DRAWING NO. D3121	REV. D SHEET 8 OF 10
DATE 06.05.17	TITLE BRACKET ASSEMBLY		SCALE 1:2

**D3121-113 BRACKET (SHOWN)****D3121-114 BRACKET (OPPOSITE)**

- 1) D3121-113 REPLACES PREMIER P/N B32-23001-13
D3121-114 REPLACES PREMIER P/N B32-23001-14
- 2) MATERIAL: 17-4 SS PER AMS 5604/5643
(REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE STRENGTH = 150 ksi
MIN YIELD TENSILE STRENGTH = 100 ksi
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 6) ENGRAVE DART P/N & LOGO IN AREAS SHOWN
- 7) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

RELEASE

06.06.02 JH

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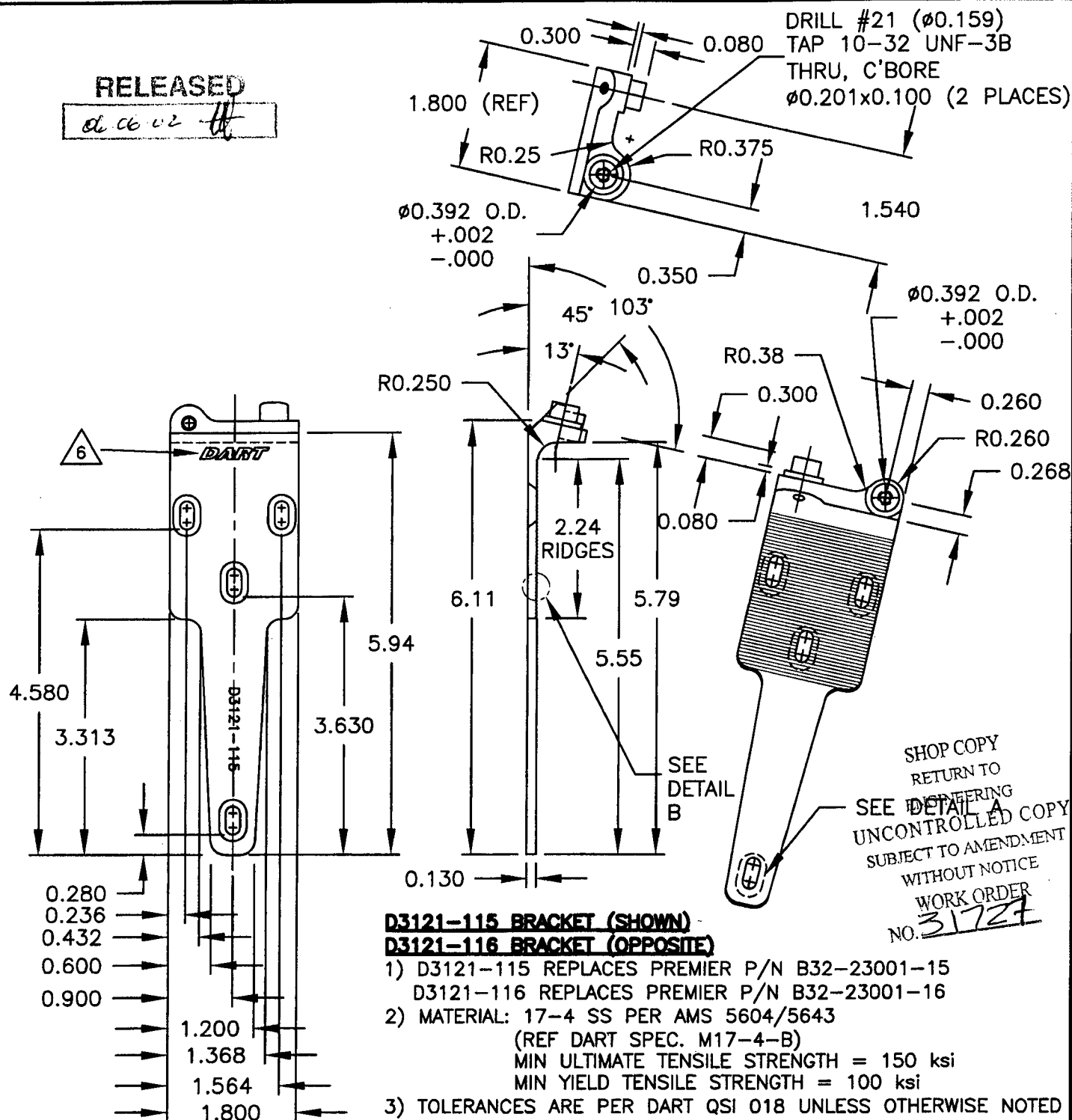
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CHECKED JH	APPROVED JH	DRAWING NO. D3121	REV. C SHEET 9 OF 10
DATE 04.02.18	TITLE BRACKET ASSEMBLY		SCALE 1:2

RELEASED

06.06.02 JH



D3121-115 BRACKET (SHOWN)
D3121-116 BRACKET (OPPOSITE)

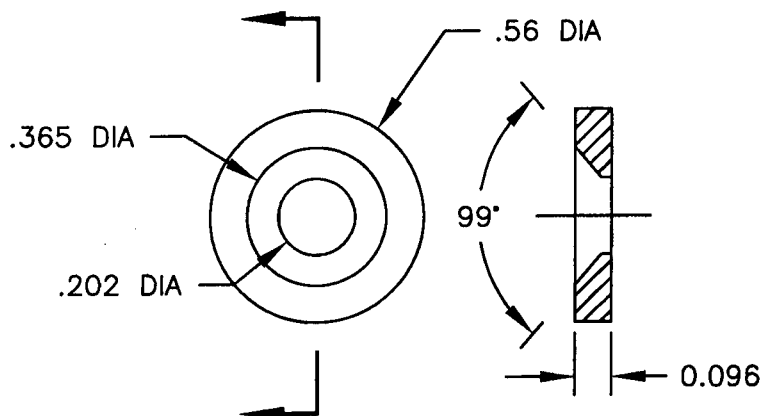
- 1) D3121-115 REPLACES PREMIER P/N B32-23001-15
D3121-116 REPLACES PREMIER P/N B32-23001-16
- 2) MATERIAL: 17-4 SS PER AMS 5604/5643
(REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE STRENGTH = 150 ksi
MIN YIELD TENSILE STRENGTH = 100 ksi
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 6) ENGRAVE DART P/N & LOGO IN AREAS SHOWN
- 7) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

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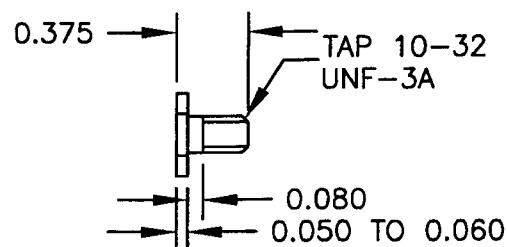
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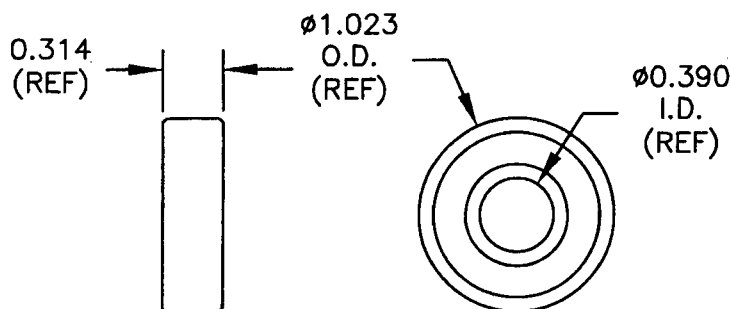
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DATE 06.05.17	TITLE BRACKET ASSEMBLY		SCALE 1:1

**D3121-17 WASHER (SCALE 2:1)**

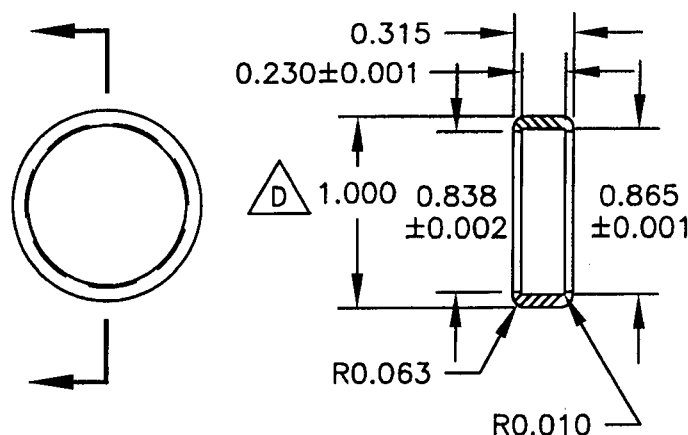
- 1) REPLACES PREMIER P/N B32-23001-17
- 2) MATERIAL: AISI 303 SS ROUND BAR, ANNEALED (REF DART SPEC. M303R)
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015

**D3121-21 BOLT (SCALE 1:1)**

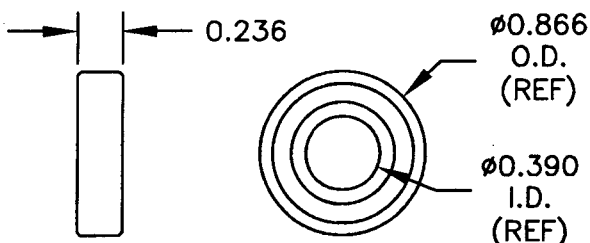
- 1) MATERIAL: AISI 303 SS HEX, ANNEALED (REF DART SPEC. M303H0.500)
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015

**D3121-19 BEARING (SCALE 1:1)**

- 1) POSSIBLE SUPPLIER: KING BEARING P/N 6000-2ZJ/EM FAFNIR P/N 9100KDD
- 2) ALL DIMENSIONS ARE IN INCHES

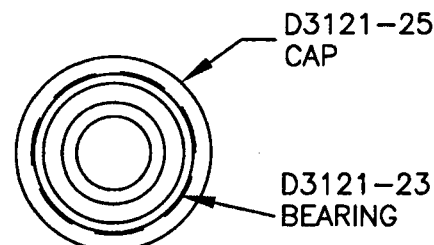
**D3121-25 CAP (SCALE 1:1)**

- 1) MATERIAL: DELRIN ROD, Ø1.25 (REF DART SPEC. M-DELRIN-R1.250)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES

**D3121-23 BEARING (SCALE 1:1)**

- 1) POSSIBLE SUPPLIER: SKF P/N 61900-2Z OR KML P/N 6900-ZZ
- 2) ALL DIMENSIONS ARE IN INCHES

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